INDEX TO VOLUME 106

Alphabetical Table of Contents of Authors

ARNOLD, STEVAN J. Species densities of predators and their prey, 220

AXELROD, DANIEL I. Edaphic aridity as a factor in angiosperm evolution, 311

BAND, H. T. Minor climatic shifts and genetic changes in a natural population of *Drosophila melanogaster*, 102

BULMER, M. G. Multiple niche polymorphism, 254

BURROWS, P. M. See C. CLARK COCKERHAM

CHARLESWORTH, BRIAN, AND JAMES T. GIESEL. Selection in populations with overlapping generations. II. Relations between gene frequency and demographic variables, 388

CHARLESWORTH, BRIAN, AND JAMES T. GIESEL. Selection in populations with overlapping generations. IV. Fluctuations in gene frequency with density-dependent selection, 402

CHARUDATTAN, R. See JAMES E. DEVAY

CLARKE, BRYAN. Density-dependent selection, 1

COCKERHAM, C. CLARK, P. M. BURROWS, S. S. YOUNG, AND TIMOTHY PROUT. Frequency-dependent selection in randomly mating populations, 493

COOK, L. M. See B. F. J. MANLY

CORBIN, KENDALL W. See THOMAS UZZELL

COX, GEORGE W. See ROBERT E. RICKLEFS

DEVAY, JAMES E., R. CHARUDATTAN, AND D. L. S. WIMALAJEEWA. Common antigenic determinants as a possible regulator of host-pathogen compatibility, 185

EWENS, W. J. The substitutional load in a finite population, 273

FAGEN, ROBERT M. An optimal life-history strategy in which reproductive effort decreases with age, 258

FAGER, E. W. Diversity: a sampling study, 293

FARRIS, JAMES S. Estimating phylogenetic trees from distance matrices, 645

FELSENSTEIN, JOSEPH. Reply to Turner's letter, 672

FINDLEY, JAMES S. See DON E. WILSON

FRANKLIN, E. C. Genetic load in loblolly pine, 262

GADGIL, MADHAV. Male dimorphism as a consequence of sexual selection, 574

GADGIL, MADHAV, AND OTTO T. SOLBRIG. The concept of *r*- and *K*-selection: evidence from wild

flowers and some theoretical considerations, 14

GIESEL, JAMES T. Maintenance of genetic variability in natural populations—an alternative implication of the Charlesworth-Giesel hypothesis, 412

GIESEL, JAMES T. Sex ratio, rate of evolution, and environmental heterogeneity, 380

GIESEL, JAMES T. See BRIAN CHARLESWORTH

GILL, DOUGLAS E. Intrinsic rates of increase, saturation densities, and competitive ability. I. An experiment with *Paramecium*, 461

HAINSWORTH, F. REED, AND LARRY L. WOLF. Power for hovering flight in relation to body size in hummingbirds, 589

HARTL, D. L. A fundamental theorem of natural selection for sex linkage or arrhenotoky, 516

HINEGARDNER, RALPH, AND DONN ERIC ROSEN. Cellular DNA content and the evolution of teleostean fishes, 621

JORDAN, CARL F., JERRY R. KLINE, AND DONALD S. SASSCER. Relative stability of mineral cycles in forest ecosystems, 237

KENDEIGH, S. CHARLES. Energy control of size limits in birds, 79

KERFOOT, WILLIAM B. Reply to Miller et al.'s letter, 548

KIANG, Y. T., AND W. J. LIBBY. Maintenance of a lethal in a natural population of *Mimulus guttatus*, 351

KLINE, JERRY R. See CARL F. JORDAN

KOEHN, RICHARD K., AND JEFFRY B. MITTON. Population genetics of marine pelecypods. I. Ecological heterogeneity and evolutionary strategy at an enzyme locus, 47

KREBS, CHARLES J. See JUDITH H. MYERS

LEVANDOWSKY, M. Ecological niches of sympatric phytoplankton species, 71

LEVIN, DONALD A. The adaptedness of corolla-color variants in experimental and natural populations of *Phlox drummondii*, 57

LEVIN, DONALD A. Low frequency disadvantage in the exploitation of pollinators by corolla variants in *Phlox*, 453

LEVIN, SIMON A. A mathematical analysis of the genetic feedback mechanism, 145

LEVINTON, JEFFREY. Stability and trophic structure in deposit-feeding and suspension-feeding communities, 472

LIBBY, W. J. See Y. T. KIANG

LONG, CHARLES A. Two hypotheses on the origin of lactation, 141

MACINTYRE, ROSS J. See STEPHEN J. O'BRIEN

MCNAUGHTON, S. J. Enzymic thermal adaptations: the evolution of homeostasis in plants, 165

MADERSON, P. F. A. On how an archosaurian scale might have given rise to an avian feather, 424

MANLY, B. F. J., P. MILLER, AND L. M. COOK. Analysis of a selective predation experiment, 719

MAYNARD SMITH, J., AND M. G. RIDPATH. Wife sharing in the Tasmanian native hen, *Tribonyx mortierii:* a case of kin selection?, 447

MERRITT, ROBERT B. Geographic distribution and enzymatic properties of lactate dehydrogenase allozymes in the fathead minnow, *Pimephales promelas*, 173

MILLER, C. B., W. G. PEARCY, AND M. H. SCHONZEIT. Comments on Kerfoot's paper, 545

MILLER, P. See B. F. J. MANLY

MITTON, JEFFRY B. See RICHARD K. KOEHN

MYERS, JUDITH H., AND CHARLES J. KREBS. Erratum, 272

NEI, MASATOSHI. Genetic distance between populations, 283

NELSON, CRAIG E. See G. BRUCE WILLIAMSON

NOTTEBOHM, FERNANDO. The origins of vocal learning, 116

O'BRIEN, STEPHEN J., BRUCE WALLACE, AND ROSS J. MACINTYRE. The α-glycerophosphate cycle in *Drosophila melanogaster*. III. Relative viability of "null" mutants at the α-glycerophosphate dehydrogenase-1 locus, 767

O'DONALD, PETER. Natural selection of reproductive rates and breeding times and its effect on sexual selection, 368

PEARCY, W. G. See C. B. MILLER

PIANKA, ERIC R. *r* and *K* selection or *b* and *d* selection?, 581

PORTER, JAMES W. Predation by *Acanthaster* and its effect on coral species diversity, 487

PROUT, TIMOTHY. See C. CLARK COCKERHAM

Reports of the Secretary, Treasurer, and Editors of The American Society of Naturalists, 676

RICKLEFS, ROBERT E. Dominance and the niche in bird communities, 538

RICKLEFS, ROBERT E., AND GEORGE W. COX. Taxon cycles in the West Indian avifauna, 195

RIDPATH, M. G. See J. MAYNARD SMITH

ROSEN, DONN ERIC. See RALPH HINEGARDNER

ROUGHGARDEN, JONATHAN. Evolution of niche width, 683

SASSCER, DONALD S. See CARL F. JORDAN

SCHONZEIT, M. H. See C. B. MILLER

SIMBERLOFF, DANIEL. Properties of the rarefaction diversity measurement, 414

SMITH, ALAN P. Buttressing of tropical trees: a descriptive model and new hypotheses, 32

SOLBRIG, OTTO T. See MADHAV GADGIL

SOULÉ, MICHAEL. Phenetics of natural populations. III. Variation in insular populations of a lizard, 429

STRAW, RICHARD M. A Markov model for pollinator constancy and competition, 597

TINNIN, ROBERT O. Interference or competition?, 672

TURNER, JOHN R. G. The benefits of gene substitution, 669

UZZELL, THOMAS, AND KENDALL W. CORBIN. Evolutionary rates in cistrons specifying mammalian hemoglobin α- and β-chains: phenetic versus patristic measurements, 555

VERMEIJ, GEERAT J. Endemism and environment: some shore molluscs of the tropical Atlantic, 89

VRIJENHOEK, ROBERT C. Genetic relationships of unisexual-hybrid fishes to their progenitors using lactate dehydrogenase isozymes as gene markers (*Poeciliopsis*, Poeciliidae), 754

VUILLEUMIER, FRANÇOIS. Bird species diversity in Patagonia (Temperate South America), 266

WALLACE, BRUCE. See STEPHEN J. O'BRIEN

WATT, WARD B. Intragenic recombination as a source of population genetic variability, 737

WENNER, ADRIAN M. Sex ratio as a function of size in marine crustacea, 321

WILLIAMSON, G. BRUCE, AND CRAIG E. NELSON. Fitness set analysis of mimetic adaptive strategies, 525

WILSON, DON E., AND JAMES S. FINDLEY. Randomness in bat homing, 418

WIMALAJEEWA, D. L. S. See JAMES E. DEVAY

WOLF, LARRY L. See F. REED HAINSWORTH

YOUNG, S. S. See C. CLARK COCKERHAM